

README

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bitemodelr

In its current form, the bitemodelr package is written to support a simulation study that aimed determine if observational coded bite timing and average bite size could be used to model cumulative intake curves. Additionally, the simulation study compared the Logistic Ordinary Differential Equation (LODE) model (Thomas et al., 2017) to Kissielf's Quadratic model. For more details about the simulation study see: https://github.com/alainapearce/LODEModel_SimStudy

Currently, this package contains functions to simulate cumulative intake datasets with process and/or measurement noise added. It is also able to fit parameter values for both the LODE and Quadratic models and provide confidence intervals for each parameter. Additionally, it includes functions to evaluate the performance of model fit including distinctness and error (goodness-of-fit, RMSE, psuedo- R^2). This package is still being updated and refined. Further documentation is also planned for the future.

Prerequisites

Included dependencies: stats, truncnorm, MASS, faux, methods, utils, truncdist, HelpersMG

Installation

```
library(devtools) devtools::install_github("alainapearce/bitemodelr")
```

Citation

Will be added soon...

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